

# SERVICE MANUAL & PARTS LIST (with price)

**SF-A7** (LX-553A)  
**DC-8000** (LX-553B)

**FEB. 1995**



SF-A7

**INDEX**

**CASIO®**

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## SPECIFICATIONS

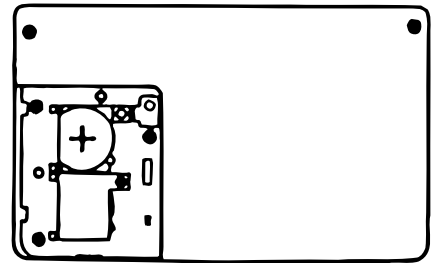
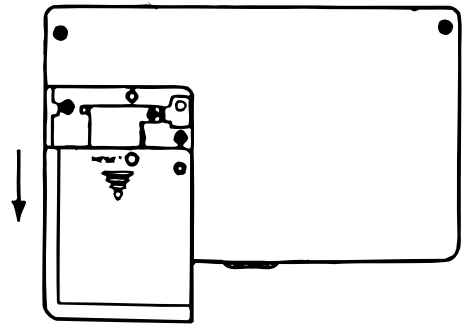
<b>Main Modes:</b>	Telephone Directory, Memo, Schedule, Reminder, Home Time, World Time and Calculator.
<b>Data storage:</b>	Storage and recall of telephone, memo, schedule, reminder data; secret area; editing; memory status display.
<b>Clock:</b>	Worldtime; reminder alarm; daily alarm; hourly time signal; accuracy under normal temperatures: $\pm 3$ seconds average
<b>Calculation:</b>	10-digit arithmetic calculations; arithmetic constants (+, −, ×, ÷); independent memory; percentages; square roots; 20-digit approximations; other mixed calculations
<b>General:</b>	
<b>Display element:</b>	16-column × 3-line LCD
<b>Memory capacity:</b>	32KB (32768 bytes)
<b>Main component:</b>	LSI
<b>Power supply:</b>	2 lithium batteries (CR2032)
<b>Power consumption:</b>	0.02 W
<b>Battery life*:</b>	Approximately 1 year (1 hour use per day); approximately 1,800 hours repeating one minute of input and 10 minutes of display in Telephone Directory. * The batteries that come installed in this unit when you purchase it are for factory test purposes, so they will probably not provide normal service life.
<b>Auto power off:</b>	Approximately 6 minutes after last key operation
<b>Operating temperature:</b>	0°C ~ 40°C (32°F ~ 104°F)
<b>Dimensions (HWD):</b>	
Unfolded:	9.3 x 130 x 159.7 mm ( $\frac{3}{8}$ x 5 $\frac{1}{8}$ x 6 $\frac{1}{4}$ inches)
Folded:	12.4 x 130 x 82 mm ( $\frac{1}{2}$ x 5 $\frac{1}{8}$ x 3 $\frac{1}{4}$ inches)
<b>Weight:</b>	95.6 g (3.4 oz)

## REPLACING THE BATTERIES

1. Loosen the screw on the back of the unit that holds the battery compartment cover in place, and remove the cover by sliding it to the direction indicated by the arrow.
2. Loosen the screw that secures one of the two battery holders in place and remove the battery holder.

**Caution:** Be sure to remove only one battery at a time. Otherwise, you will lose all data stored in memory.

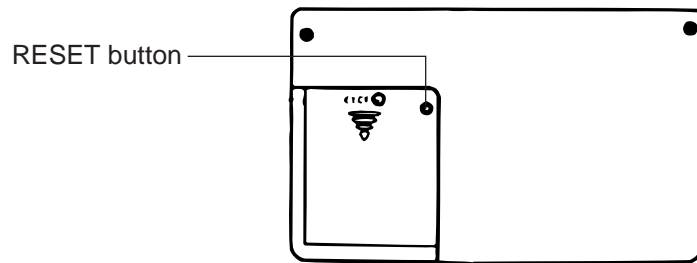
3. Replace the old battery with a new one, making sure that the positive (+) side of the new battery is facing up (so you can see it).
4. Replace the battery holder and secure it by tightening its screw.
  - Be careful that you do not overtighten the screw.
5. Repeat Steps 2 through 4 for the other battery.
  - Be sure to replace both batteries. Never mix old batteries with new ones, and be sure to use CR2032 lithium batteries only.
6. After you replace both batteries, replace the battery compartment cover and secure it by tightening its screw.
  - Be careful that you do not overtighten the screw.



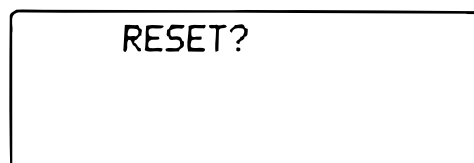
## TO RESET THE UNIT'S MEMORY

### Warning!

The following procedure erases all data stored in the memory of the unit. Perform the following operation only when you want to delete all data and initialize the settings of the unit. Remember — you should always keep copies of important data by writing it down.



1. Switch on power and press the RESET button with a thin, pointed object.



### Warning!

The next step deletes all data stored in the unit's memory. Make sure that you really want to delete the data before you continue!

- Press EXE to reset the memory and delete all data or any other key to abort the reset operation without deleting anything.

Following the reset operation described above, the Home Time display appears and the unit settings are initialized as noted below.

Home Time:	12-hour format JAN/1/1995 AM/12:00 00
Zone:	Tokyo (TYO)
World Time:	London (LON)
Daily Alarm:	12:00 AM
Sound:	Reminder alarm → OFF Daily alarm → OFF Key input tone → OFF Hourly time signal → OFF

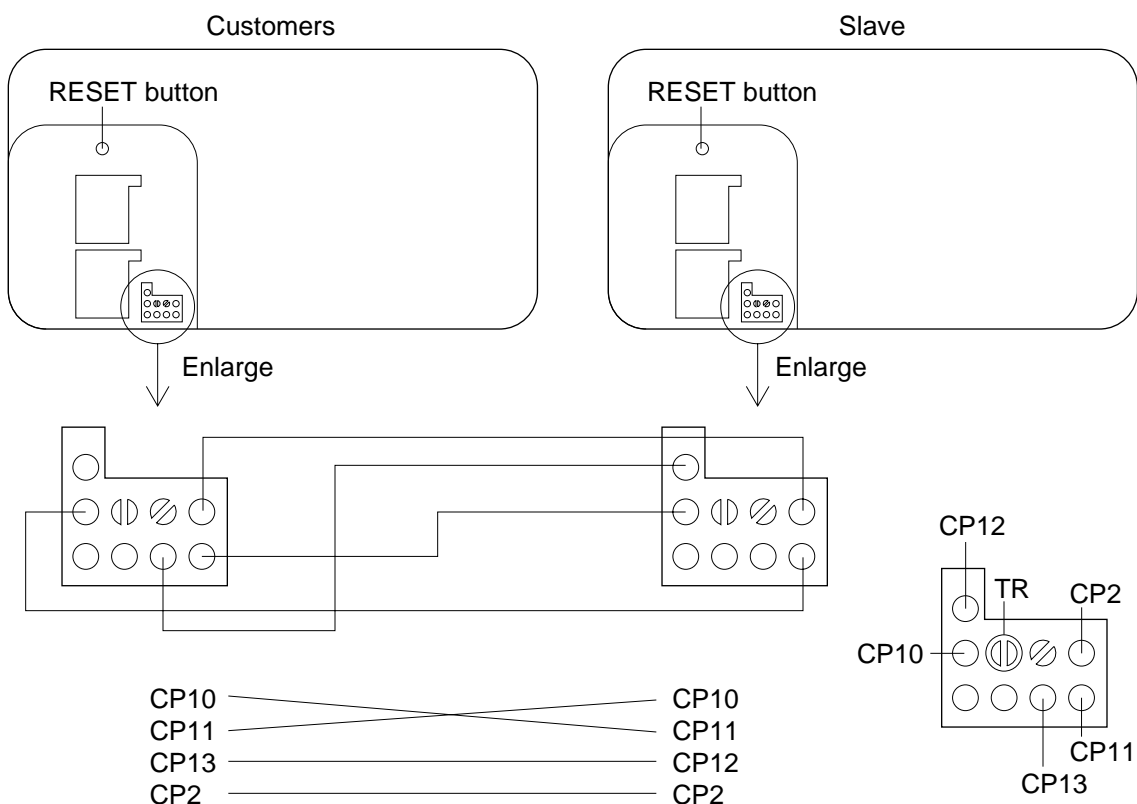
## TO SAVE THE DATA

The unit can transfer the data stored to another unit.

**CAUTION:** Before connecting wires, be sure to put the units in transmission and receiving mode. Furthermore, after completing saving data, remove wires while showing OK or NG on display. If no, data stored in customer's unit are corrupted.

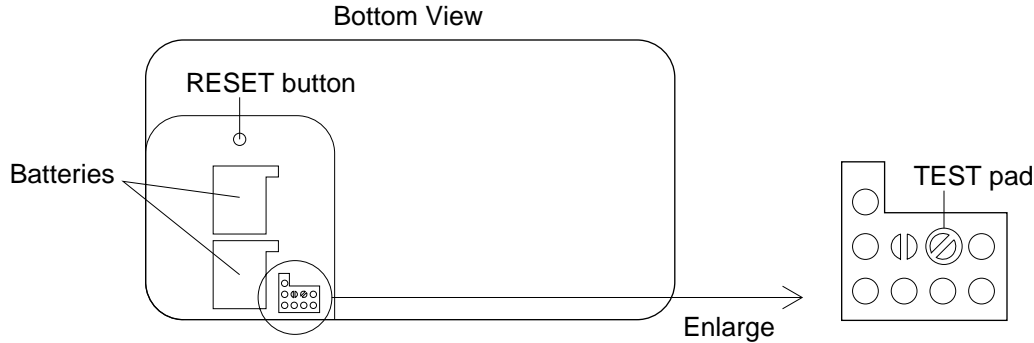
To save the data, the following steps must be followed;

- Remove the battery cover of both units.
- Press RESET button of both units.
- Short the pad TR of customer's unit. (Display shows "T".)
- Short the pad TR twice of slave unit. (Display shows "R".)
- Connect 4 terminals on PCB with wires as shown in the figure below.

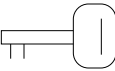
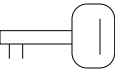



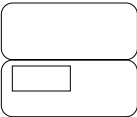


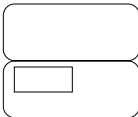
6. Press SET key of customer's unit. (No display)
7. Press SET key of slave unit. (No display) (Saving data is completed, the display shows OK.)
8. Remove 4 wires while showing OK on display.
9. If the display shows NG, execute the above operation from 2.

# **OPERATION CHECK**



No.	OPERATION	DISPLAY	NOTE
1	RESET	RESET?	RESET
2	EXE	<div> <div>1TEL 2SCHD 3REM</div> <div>4SEC 5TIME 6ALM</div> <div>7MEMO 8CAL</div> </div> <div>MENU</div>	
3	(SEARCH)▽ 3, 4 times	<div> <div>1TEL 2SCHD 3REM</div> <div>4SEC 5TIME 6ALM</div> <div>7MEMO 8CAL</div> </div> <div>MENU</div>	Contrast adjustment
4	TEST pad	All dots	Confirm display and high-pitched buzzer sound.
5	TEST pad	Vertical stripes.	Confirm display and alarm sound.
6	TEST pad	Vertical stripes.	Confirm display and low-pitched buzzer sound.

NO.	OPERATION	DISPLAY	NOTE
7	TEST pad	No display	
8	TEST pad (Takes 5 min.)	 = OK = ALPHA	
		 = NG = ALPHA	
9	ON 1	 NAME? ALPHA	USER MODE (TEL)
10	A S D F G H J K L Z X C V B N M EXE 2 3 4 5 6 EXE 7 8 9 0 SYMBOL ▷ ▷ ▽ ◁ △ EXE EXE (SEARCH) △	 ASDFGHJKLZXCVBNM TEL 23456 FAX 7890! ALPHA	
11	EDIT DEL DEL INS SPACE	 _FGHJKLZXCVBNM TEL 23456 FAX 7890! ALPHA	
12	CLEAR A ◁ EXE CAPA	◆CAPACITY◆      0 % USED              0 FREE      32768 ALPHA	
13	OFF	No display	
14	ON RESET	RESET?	RESET
15	EXE	 MENU 1TEL 2SCHD 3REM 4SEC 5TIME 6ALM 7MEMO 8CAL	

NO.	OPERATION	DISPLAY	NOTE
16	(SEARCH) ▽, 3 times	 1TEL 2SCHD 3REM 4SEC 5TIME 6ALM 7MEMO 8CAL MENU	

## LOW BATTERY TEST

NO.	OPERATION	DISPLAY	NOTE
1	ON	 LOW BATTERY !  MENU	VDD is 5.07V or below.
2	OFF		

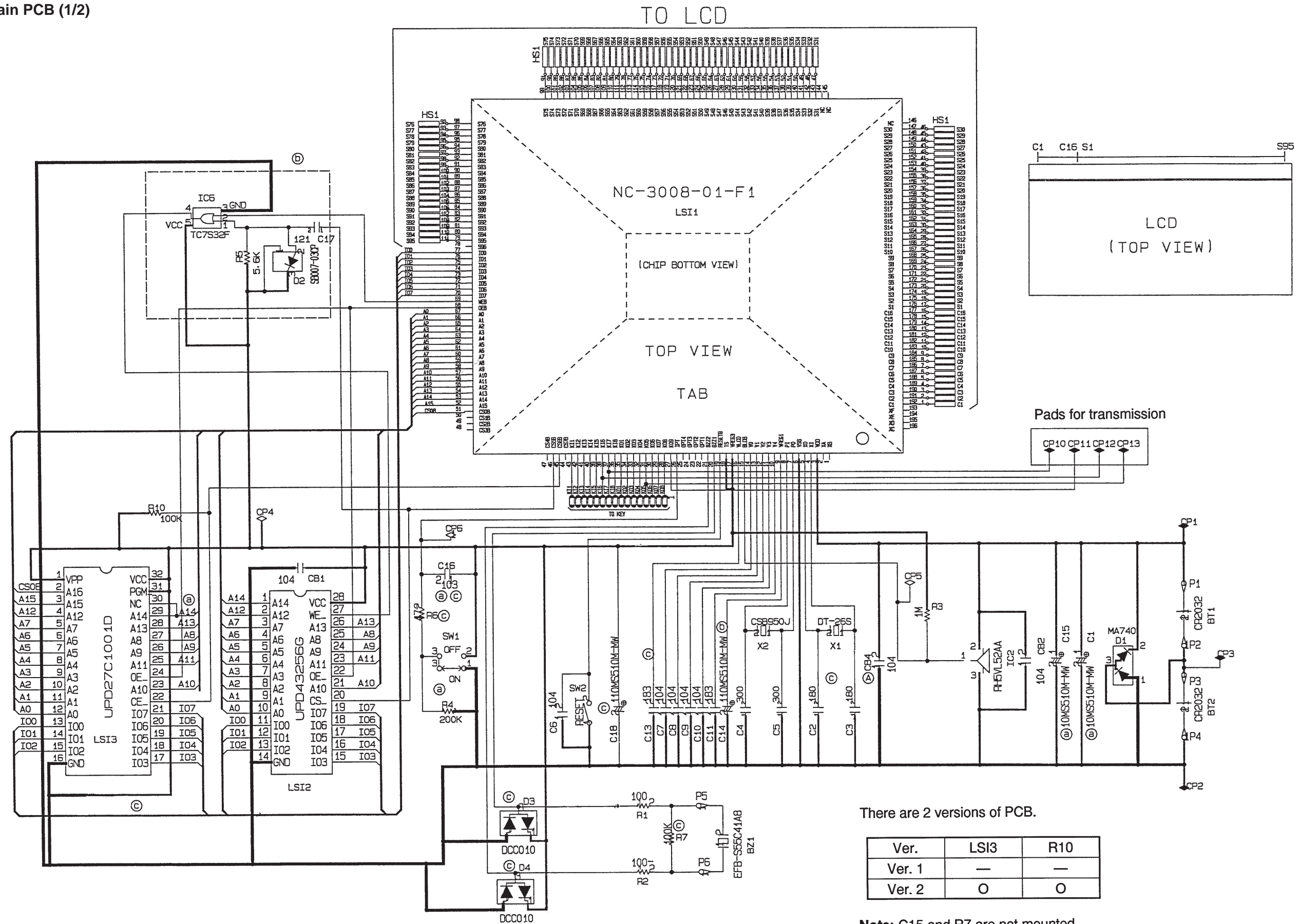
## TROUBLESHOOTING

SYMPTOM	CAUSE	SOLUTION
No power	Battery shortage	Replace batteries
	Poor contact of battery terminals	Replace or polish them
	Defective TAB-LSI	Replace it
	Poor contact SW1	Replace it
	Poor soldering of power supply circuit	Resolder them
	Defective PCB unit	Replace it
No display or wrong display	Defective TAB LSI	Replace it
	Defective heat seal	Replace it
	Defective LCD	Replace it
	Poor soldering of power supply circuit	Resolder it



SCHEMATIC DIAGRAM

Main PCB (1/2)

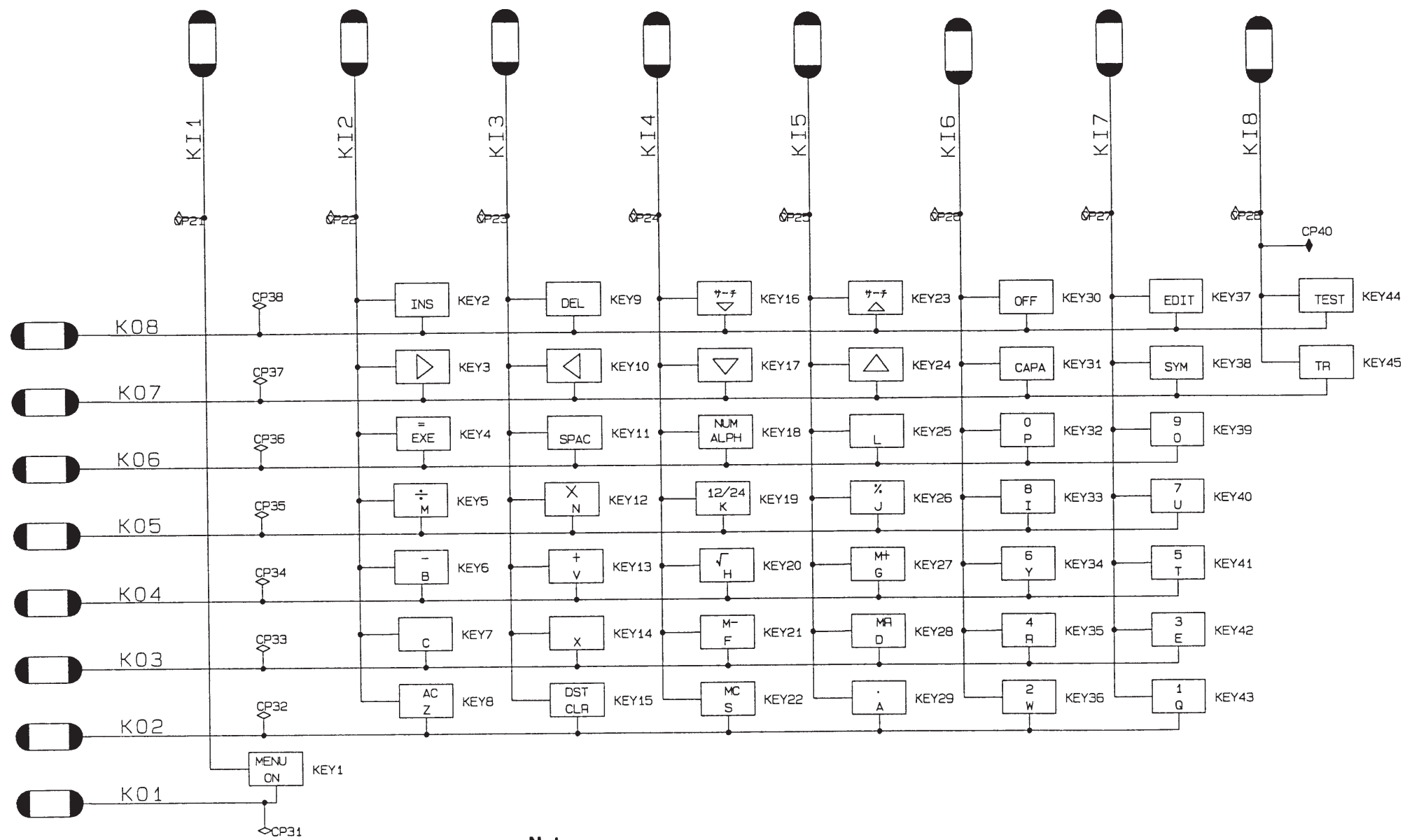


There are 2 versions of PCB.

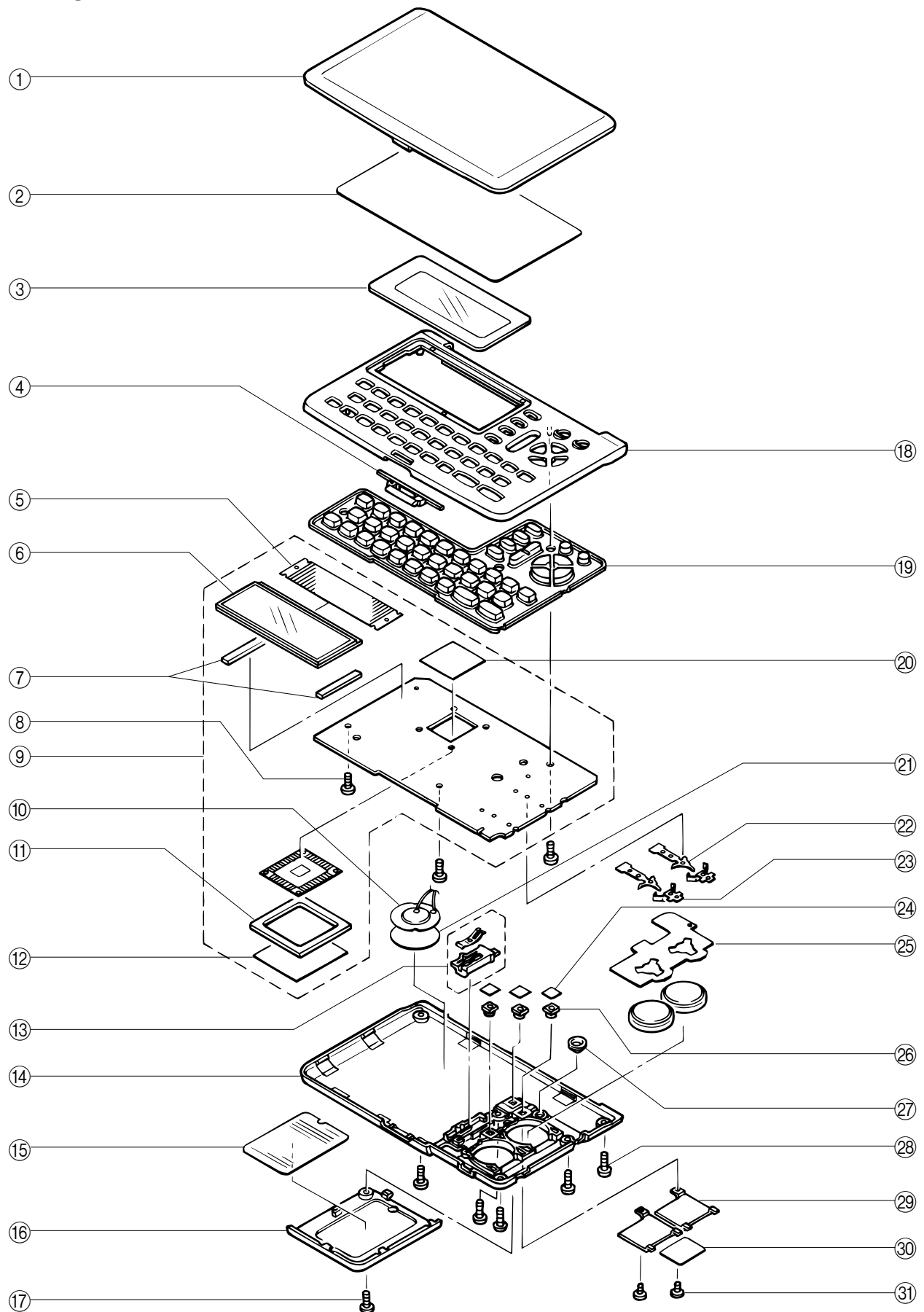
Ver.	LSI3	R10
Ver. 1	—	—
Ver. 2	O	O

Note: C15 and R7 are not mounted.

Main PCB (2/2)



# EXPLODED VIEW



**PARTS LIST**

N	Item	Code No.	Parts Name	Specification	Q'ty		M	FOB Japan N.R.Yen Unit Price	R
					AT	BT			
PCB ASS'Y									
N	5	5610 8580	Heat seal	FX200P50302	1	1	5	80	C
N	6	3335 5488	LCD	CD426-TS	1	1	1	260	A
N	7	6414 5410	Sponge cushion	FH100030001	2	2	20	5	X
N	11	6414 5420	Spacer	EL000L98109	1	1	20	5	X
	12	6410 0830	Blind tape L180	A414656-1	1	1	20	10	X
	20	6403 9330	Tape C-L170	A413108-1	1	1	20	6	X
	22	6409 6300	Battery plate (+)	EF01DB20102	2	2	20	16	X
	23	6409 6310	Battery plate (-)	EF02DB10100	2	2	20	16	X
	C1,C15,C18	2803 6806	Capacitor	10MS510M-MW	3	3	20	13	C
N	C11,C13	6414 5530	Chip capacitor	CP018C612T1	2	2	20	11	C
N	C16	6054 3080	Chip capacitor	CP001B612T7	1	1	20	16	C
N	C17	6414 5500	Chip capacitor	CP120F602T6	1	1	20	11	C
	C2,C3	6511 7510	Chip capacitor	CP018F602A7	2	2	20	11	C
	C4,C5	6511 7520	Chip capacitor	CP030F602T7	2	2	20	11	C
	C6,CB1,CB2 C7~C10	6511 7560	Chip capacitor	CP001A432T8	7	7	20	7	C
	D1	2390 2135	Diode	BC20MA740T0	1	1	5	50	C
N	D2	6414 5510	Diode	BC1SB007BT8	1	1	10	30	C
	D3,D4	2315 0212	Chip diode	MA153-(TX)	2	2	10	33	C
	IC2	2105 3297	IC	S-80752AN-JG-T1	1	1	10	47	C
	IC6	2105 1568	IC	TC7S32F-TE85R	1	1	20	27	B
N	LSI1	6413 1460	COF3008-F1 sub ass'y	A340092*1	1	1	1	670	A
	LSI2	2011 3955	LSI	uPD43256BGU-B12	1	1	1	690	B
	R1,R2	6512 1360	Chip resistor	CC0012D11T6	2	2	20	3	C
	R3	6512 1440	Chip resistor	CC0016D11T4	1	1	20	3	C
N	R4	6414 5520	Chip resistor	CC2003D11T1	1	1	20	3	C
N	R5	6414 5490	Chip resistor	CC0562D11T8	1	1	20	3	C
N	R6	6414 5480	Chip resistor	CC0470D11T0	1	1	20	3	C
	X1	6510 4550	Crystal	BD0063P2509	1	1	5	55	X
	X2	6414 5460	Ceramic oscillator	BD0078P4605	1	1	5	80	C
COMPONENT									
N	1	6414 5670	Hard case	FC10L981016	0	1	5	80	X
N	1	6414 5270	Hard case	FC10L981008	1	0	5	80	X
N	2	6414 5660	Operation label	HGF00004009	0	1	10	30	X
N	2	6414 5260	Operation label	HGF00003509	1	0	10	30	X
N	3	6414 5380	Display plate	EL5F0016106	1	0	5	70	X
N	3	6414 5630	Display plate	EL5F0016203	0	1	5	70	X
	4	6410 9670	Push button	FB3DB100001	1	0	1	130	X
N	4	6414 5600	Push button	FB3DB100108	0	1	1	130	X
N	8	6414 5330	Screw	MAB20103201	3	3	20	3	X
N	9	6414 5310	PCB ass'y	L98XXX0300V*1	1	1	1	2,070	B
	10	3122 2380	Buzzer	EFB-S55C41A8	1	1	10	36	X
	13	6408 5920	SW knob ass'y	DB2AXX4A00M	1	1	10	30	B
N	14	6414 5640	Lower cabinet	FAB0L981013	0	1	10	40	X
N	14	6414 5230	Lower cabinet	FAB0L981005	1	0	10	40	X
N	15	6414 5250	Battery cover label	HGF00003606	1	1	20	10	X
N	16	6414 5650	Battery cover	FAD0L981010	0	1	10	30	C
N	16	6414 5240	Battery cover	FAD0L981001	1	0	10	30	C
N	17	6414 5390	Screw	MAA90004302	1	1	20	3	X
N	18	6414 5350	Upper cabinet	FAA0L981009	1	0	1	120	X

Notes: N – New parts  
M – Minimum order/supply quantity  
R – Rank  
Q – Quantity used per unit

R – A : Essential  
B : Stock recommended  
C : Others  
X : No stock recommended

N	Item	Code No.	Parts Name	Specification	Q'ty		M	FOB Japan N.R.Yen Unit Price	R
					AT	BT			
N	18	6414 5620	Upper cabinet	FAA0L981017	0	1	1	120	X
N	19	6414 5320	Rubber sheet	LAOL9810001	1	0	1	250	X
N	19	6414 5610	Rubber sheet	LA0L9810108	0	1	1	250	X
	21	6510 4500	Buzzer tape	HGFC0000501	1	1	20	17	X
	24	6510 4440	Insulation seal	HGFC0001206	3	3	20	6	X
N	25	6414 5370	Overlay mylar	EL4F0007105	1	1	20	10	X
	26	6512 1080	Nut	MD100000602	3	3	20	13	X
	27	6511 8400	Key contact rubber	LADB0220105	1	1	20	10	X
N	28	6414 5340	Screw	MAB20106307	5	5	20	3	X
	29	6409 6120	Battery holder	ECDB1011108	1	1	20	26	X
	30	6409 6210	Battery change label	HGC00001102	1	1	20	7	X
	31	6512 0990	Screw	MAA80006329	2	2	20	3	X

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